

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for the acquisition of burst synchronisation signals in a spread spectrum communication system, comprising the following steps:

1) Receiving a burst synchronisation signal,

2) Applying to said received burst synchronisation signal a dwelling procedure according to a scheduling scheme, whereby said dwelling procedure comprises the steps of calculating a matched filter output, summing said outputs over one slot time, calculating the energy in said sum, searching the maximum energy value and passing it to a Random Access Memory,

3) Based on said scheduling scheme containing a set of $X=(N+1)/2$ hypotheses, being numbered $0,1,\dots,X-1$ and N being the number of slots in 1 frame, the slots being numbered $0,1,\dots,N-1$, a dwelling procedure being performed in hypothesis $n=0,\dots,X-2$ in slots n , $n+N-D$ and $n+D$ and in hypothesis $n=X-1$ in slots n and $n+D$, D being the longest distance in slots between two sync slots,

4) At the end of the scheduling scheme searching for the overall maximum energy value among the energy values stored in said Random Access Memory, whereby said scheduling scheme is built up by

(a) choosing anya first hypothesis from said set of hypotheses,

(b) performing a dwelling procedure in the frame slots as indicated in the chosenfirst hypothesis,

(c) leaving one slot open after the last dwelling procedure for said chosenfirst hypothesis,

(d) choosing ana second hypothesis not used yet, having in the next available slot a dwelling procedure in that slot and not in the subsequent slot or having in the next available slot a dwelling procedure in that slot as well as in the subsequent,

(e) performing a dwelling procedure in the frame slots as indicated in the chosensecond hypothesis,

_____ (f) leaving one slot open after the last dwelling procedure for said second hypothesis,

(g) repeating (d-f) until all hypotheses have been used, whereby in case there is no unused hypothesis that matches, the slot is left empty and the following slot is used.

2. (Original) A method for the acquisition of burst synchronisation signals as in claim 1, whereby steps (b) and (e) are repeated.

3. (Currently Amended) A method for the acquisition of burst synchronisation signals in a spread spectrum communication system, comprising the following steps:

- 1) Receiving a burst synchronisation signal,
- 2) Applying to said received burst synchronisation signal a dwelling procedure according to a scheduling scheme, whereby said dwelling procedure comprises the steps of calculating a matched filter output, summing said outputs over one slot time, calculating the energy in said sum, searching the maximum energy value and passing it to a Random Access Memory,
- 3) Based on said scheduling scheme containing a set of $X=(N+1)/2$ hypotheses, being numbered $0,1,\dots,X-1$ and N being the number of slots in 1 frame, the slots being numbered $0,1,\dots,N-1$, a dwelling procedure being performed in hypothesis $n=0,\dots,X-2$ in slots $n, n+N-D$ and $n+D$ and in hypothesis $n=X-1$ in slots n and $n+D$, D being the longest distance in slots between two sync slots,
- 4) At the end of the scheduling scheme searching for the overall maximum energy value among the energy values stored in said Random Access Memory, whereby said scheduling scheme is built up by
 - (a) choosing any first hypothesis from said set of hypotheses,
 - (b) performing a dwelling procedure in the frame slots as indicated in the chosenfirst hypothesis,
 - (c) choosing an second hypothesis not used yet, having in the next available slot a dwelling procedure in that slot and not in the subsequent slot or having in the next available slot a dwelling procedure in that slot as well as in the subsequent,

- (d) performing a dwelling procedure in the frame slots as indicated in the ~~chosen~~second hypothesis,
- (e) repeating (c-d) until all hypotheses have been used, whereby in case there is no unused hypothesis that matches, the slot is left empty and the following slot is used.

4. (Previously Presented) A method for the acquisition of burst synchronisation signals according to claim 1, wherein N=15 and D=8.

5. (Currently Amended) A module for the acquisition of burst synchronisation signals, comprising means for applying a method for the acquisition of burst synchronisation signals in a spread spectrum communication system, comprising the following steps:

1) receiving a burst synchronisation signal,

2) applying to said received burst synchronisation signal a dwelling procedure according to a scheduling scheme, whereby said dwelling procedure comprises the steps of calculating a matched filter output, summing said outputs over one slot time, calculating the energy in said sum, searching the maximum energy value and passing it to a Random Access Memory,

3) based on said scheduling scheme containing a set of $X=(N+1)/2$ hypotheses, being numbered 0,1,...,X-1 and N being the number of slots in 1 frame, the slots being numbered 0,1,...,N-1, a dwelling procedure being performed in hypothesis $n=0,...,X-2$ in slots n, n+N-D and n+D and in hypothesis $n=X-1$ in slots n and n+D, D being the longest distance in slots between two sync slots,

4) at the end of the scheduling scheme searching for the overall maximum energy value among the energy values stored in said Random Access Memory, whereby said scheduling scheme is built up by:

- (a) choosing ~~any~~first hypothesis from said set of hypotheses,
- (b) performing a dwelling procedure in the frame slots as indicated in the ~~chosen~~first hypothesis,
- (c) leaving one slot open after the last dwelling procedure for said ~~chosen~~first hypothesis,

- (d) choosing an second hypothesis not used yet, having in the next available slot a dwelling procedure in that slot and not in the subsequent slot or having in the next available slot a dwelling procedure in that slot as well as in the subsequent,
- (e) performing a dwelling procedure in the frame slots as indicated in the chosen second hypothesis,
- (f) leaving one slot open after the last dwelling procedure for said second hypothesis,
- (g) repeating (d-f) until all hypotheses have been used, whereby in case there is no unused hypothesis that matches, the slot is left empty and the following slot is used.

6. (Currently Amended) An integrated circuit device, comprising a module for the acquisition of burst synchronisation signals, comprising means for applying a ~~method as in any of the previous claims~~—method for the acquisition of burst synchronisation signals in a spread spectrum communication system, comprising the following steps:

- 1) receiving a burst synchronisation signal,
- 2) applying to said received burst synchronisation signal a dwelling procedure according to a scheduling scheme, whereby said dwelling procedure comprises the steps of calculating a matched filter output, summing said outputs over one slot time, calculating the energy in said sum, searching the maximum energy value and passing it to a Random Access Memory,
- 3) based on said scheduling scheme containing a set of $X=(N+1)/2$ hypotheses, being numbered $0,1,\dots,X-1$ and N being the number of slots in 1 frame, the slots being numbered $0,1,\dots,N-1$, a dwelling procedure being performed in hypothesis $n=0,\dots,X-2$ in slots n , $n+N-D$ and $n+D$ and in hypothesis $n=X-1$ in slots n and $n+D$, D being the longest distance in slots between two sync slots,
- 4) at the end of the scheduling scheme searching for the overall maximum energy value among the energy values stored in said Random Access Memory, whereby said scheduling scheme is built up by:
 - (a) choosing any first hypothesis from said set of hypotheses,

- (b) performing a dwelling procedure in the frame slots as indicated in the chosenfirst hypothesis,
- (c) leaving one slot open after the last dwelling procedure for said chosenfirst hypothesis,
- (d) choosing an second hypothesis not used yet, having in the next available slot a dwelling procedure in that slot and not in the subsequent slot or having in the next available slot a dwelling procedure in that slot as well as in the subsequent,
- (e) performing a dwelling procedure in the frame slots as indicated in the chosensecond hypothesis,
- (f) leaving one slot open after the last dwelling procedure for said second hypothesis,
- (g) repeating (d-f) until all hypotheses have been used, whereby in case there is no unused hypothesis that matches, the slot is left empty and the following slot is used.

7. (Previously Presented) A receiver comprising a module as in claim 5.

8. (Previously Presented) A spread-spectrum communication apparatus comprising a module as in claim 5.

9. (Previously Presented) A receiver comprising an integrated circuit device as in claim 6.

10. (Previously Presented) A spread-spectrum communication apparatus comprising an integrated circuit as in claim 6.

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Amendments to the Drawings:

The drawings have been corrected to include Figure 6. A replacement sheet is attached hereto.